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AUG 3 0 2004

Technology Center 2600

United States Department of Commerce  
PATENT AND TRADEMARK OFFICE  
Assistant Secretary and  
Commissioner of Patents and Trademarks  
Washington, DC 20231

RE:

Dear Sir/Madam:

The enclosed document was received in our office on July 29, 2004. We believe we have received this document in error.

If you have any questions or concerns regarding this matter, please feel free to contact our office at the number above.

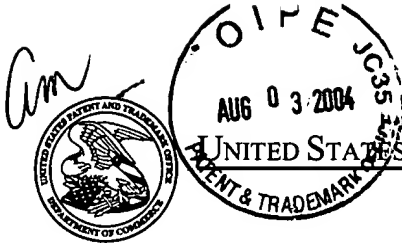
Sincerely,

*Gretta Evans*

MERCHANT & GOULD  
Prosecution Docket Department

Enclosure

Minneapolis/St. Paul  
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,781	07/03/2001	Yoshiaki Komma	10873.759US01	1848

23552 7590 07/26/2004

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MINNEAPOLIS, MN 55402-0903

EXAMINER

TRAN, THANG V

ART UNIT	PAPER NUMBER
2653	11

DATE MAILED: 07/26/2004

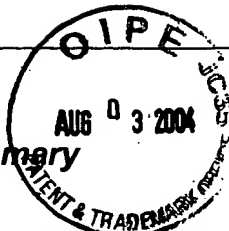
Please find below and/or attached an Office communication concerning this application or proceeding.

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AUG 30 2004

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# Office Action Summary



Application No.

09/776,706

Applicant(s)

CHEONG ET AL.

Examiner

Thang Tran

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2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 27-32 is/are allowed.
- 6) ☒ Claim(s) 7, 12-19 and 26 is/are rejected.
- 7) ☒ Claim(s) 8-11 and 20-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

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## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The communication dated 05/07/04 has been considered with the following results:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 5,793,407).

Park et al., according to Figs. 3 and 4, show an optical apparatus comprising: a slider (6); an actuator assembly (7,8) pivotable in a radial direction of an optical disk, supporting the slider (6); and an optical pickup (14) for focusing a light beam from a light source to form a light spot on the recording surface of the optical disk, where the optical pickup including a light source (1), an optical path changing unit (15); an objective lens (see column 3, lines 58-67), a photodetector (17), and at least an optical fiber (16) connecting the light source and the optical path changing unit (15) thereby the optical loss between the light source and the optical path is suppressed due to the use of the optical fiber, as recited in claim 7.

3. Claims 7, 12, 19 and 26 are rejected under 35 U.S.C. 102(5) as being anticipated by Jordache et al (US 6,288,985).

Jordache et al., according to Figs. 1-22, show an optical apparatus (see Figs. 1, 4-6 as example) comprising: a slider (292); an actuator assembly (see Fig. 1, 21 or 22 as example) pivotable in a radial direction of an optical disk, supporting the slider; and an optical pickup (see 280 in Fig. 4) for focusing a light beam from a light source to form a light spot on the recording surface of the optical disk, where the optical pickup including a light source (282 in Fig. 4), an optical path changing unit (376 in Fig. 6); an objective lens (378 in Fig. 6), a photodetector (302 in Fig. 4), and at least an optical fiber (209) connecting the light source and the optical path changing unit (376) thereby the optical loss between the light source and the optical path is inherently suppressed due to the use of the optical fiber, as recited in claim 7.

Regarding claim 12, see Figs. 1 and 18 which show an optical system comprising: an actuator arm (716) pivotable in a radial direction of an optical disk; a load beam (746, 722) support by the actuator arm (716) and having a first end movable in the radial direction (751) relative to a movement of the arm; and a slide element (724) having an objective lens (725) attached to the load beam, and the slide element movable over a recording surface of the optical disk, as recited in claim 12.

Regarding claim 19, see an optical pickup (108 in Fig. 1 mounted on an actuator arm) comprising (see Fig. 4 for details) a light source (282); photodetector (302); an optical path changing unit (376 in Fig. 6); and an optical fiber (296) connecting the light source and the optical path changing unit (376) as recited in claim 19.

Regarding claim 26, see Fig. 1 and 6 comprising: an actuator assembly (see Fig. 1) pivotable in a radial direction of an optical disk for supporting a slider (100 or 292); and an optical pickup (see 108 in Fig. 1 mounted on an actuator arm) comprising (see Fig. 4 for details)

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a light source (282); photodetector (302); an optical path changing unit (376 in Fig. 6); and an optical fiber (296) connecting the light source and the optical path changing unit (376) as recited in claim 26.

4. Claims 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukakusa (US 5,615,203).

Fukakusa, according to Figs. 12-13 and 20, shows an optical system comprising: an all features of the instant claimed invention as interpreted

Regarding claim 12, see Figs. 10-13 and 20 which show an optical system (see Fig. 12 as example) comprising: an actuator arm (90, 66) pivotable in a radial direction of an optical disk (see Fig. 20 for details of the actuator arm); a load beam (80) support by the actuator arm (90,66) and having a first end movable in the radial direction relative to a movement of the arm (90, 66); and a slide element (30) having an objective lens (20) and attached to the load beam (80); and the slide element movable over a recording surface of the optical disk, as recited in claim 12.

Regarding claims 13 and 14, see the driving unit including magnet 56 mounted on the end of the actuator (90, 66) and coil 62 mounted on the end of the load beam (80).

Regarding claim 15, see Fig. 12 which shows the load beam (80) having a second end fixed to a second end of the arm (90, 66); and intermediate region located between the first and second end of the load beam is flexible (see spring 87) so as to enable the movement of the first end of the load beam in the radial direction relative to the arm (90,66).

Regarding claim 16, see Fig. 12 which also shows the intermediate region comprising a pair of extensions (this can be either springs 84 or 87) separated by a gap from each other, connecting facing edge of the first and second end of a load arm.

Regarding claims 17 and 18, see the rejection applied to claims 15 and 16 above.

***Allowable Subject Matter***

5. Claims 8-11 and 20-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1-6 and 27-32 are allowed.

***Response to Arguments***

7. In response Applicant's arguments filed 05/07/04, Applicant's attention is drawn to Fig. 12 of Fukakusa and its respective disclosure which show that spring (87) interpreted as part of a load beam (or an intermediated region as recited in claim 15) is moveable in a radial direction relative to the arm actuator (90) when tracking operation is performed. The spring 87 must move in the radial direction in order to move an objective lens when tracking operation is performed. The tracking operation cannot be performed if the spring 87 does not move in the radial direction. Accordingly, Fukakusa does teach the use of a load beam moveable in the radial direction.

Also, Applicant should note that Park does teach the use of an optical pickup including a light source, but the light source is not mounted on an arm actuator. However, since claim 7 does not recite where an optical pickup or a light source is mounted, limitation related to

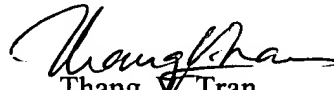
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location or mounted position of the light source cannot read into the claim for the purpose of avoiding the prior art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (703) 308-1551. The examiner can normally be reached on Tuesday to Friday, from 7:30AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Thang V. Tran  
Primary Examiner  
Art Unit 2653





## USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES

In support of its 21<sup>st</sup> Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) **provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions** via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) **cease mailing paper copies of U.S. patents and U.S. patent application publications with Office actions** (in applications and during reexamination proceedings) except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications during the international stage.

### Schedule

June 2004	TCs 1600, 1700, 2800 and 2900
July 2004	TCs 3600 and 3700
August 2004	TCs 2100 and 2600

All U.S. patents and U.S. patent application publications are available on the USPTO web site. However, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible by phone at 866-217-9197 (toll-free), 703-305-3028 or 703-308-6845 or electronically via the Internet at [ebc@uspto.gov](mailto:ebc@uspto.gov).

### **Other Options**

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide U.S. patents and patent application publications.

*For complete instructions see the Official Gazette Notice, USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES, on the USPTO web site.*



**NOTICE OF OFFICE PLAN TO CEASE SUPPLYING COPIES OF CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS, AND PILOT TO EVALUATE THE ALTERNATIVE OF PROVIDING ELECTRONIC ACCESS TO SUCH U.S. PATENT REFERENCES**

**Summary**

The United States Patent and Trademark Office (Office or USPTO) plans in the near future to: (1) cease mailing copies of U.S. patents and U.S. patent application publications (US patent references) with Office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty and those made during reexamination proceedings; and (2) provide electronic access to, with convenient downloading capability of, the US patent references cited in an Office action via the Office's private Patent Application Information Retrieval (PAIR) system which has a new feature called "E-Patent Reference." Before ceasing to provide copies of U.S. patent references with Office actions, the Office shall test the feasibility of the E-Patent Reference feature by conducting a two-month pilot project starting with Office actions mailed after December 1, 2003. The Office shall evaluate the pilot project and publish the results in a notice which will be posted on the Office's web site ([www.USPTO.gov](http://www.USPTO.gov)) and in the Patent Official Gazette (O.G.). In order to use the new E-Patent Reference feature during the pilot period, or when the Office ceases to send copies of U.S. patent references with Office actions, the applicant must: (1) obtain a digital certificate from the Office; (2) obtain a customer number from the Office, and (3) properly associate applications with the customer number. The pilot project does not involve or affect the current Office practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of references will continue to be provided by the USPTO for searches and written opinions prepared by the USPTO for international applications during the international stage and for reexamination proceedings.

**Description of Pilot Project to Provide Electronic Access to Cited U.S. Patent References**

On December 1, 2003, the Office will make available a new feature, E-Patent Reference, in the Office's private PAIR system, to allow more convenient downloading of U.S. patents and U.S. patent application publications. The new feature will allow an authorized user of private PAIR to download some or all of the U.S. patents and U.S. patent application publications cited by an examiner on form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants on form PTO/SB08 (1449) as part of an IDS. The retrieval of some or all of the documents may be performed in one downloading step with the documents encoded as Adobe Portable Document format (.pdf) files, which is an improvement over the current page-by-page retrieval capability from other USPTO systems.

## **Steps to Use the New E-Patent Reference Feature During the Pilot Project and Thereafter**

Access to private PAIR is required to utilize E-Patent Reference. If you don't already have access to private PAIR, the Office urges practitioners, and applicants not represented by a practitioner, to take advantage of the transition period to obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate, obtain a USPTO customer number, associate all of their pending and new application filings with their customer number, install no-cost software (supplied by the Office) required to access private PAIR and E-Patent Reference feature, and make appropriate arrangements for Internet access. The full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <http://www.uspto.gov/ebc/downloads.html>. Note that a notarized signature will be required to obtain a digital certificate.

To get a Customer Number, download and complete the Customer Number Request form, PTO-SB125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or patent agent, then your registration number must be associated with your customer number. This is accomplished by adding your registration number to the Customer Number Request form. A description of associating a customer number with an application is described at the EBC web page at: [http://www.uspto.gov/ebc/registration\\_pair.html](http://www.uspto.gov/ebc/registration_pair.html).

The E-Patent Reference feature will be accessed using a new button on the private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents as Adobe Portable Document Format (.pdf) files. For a limited period of time, the USPTO will include a copy of this notice with Office actions to encourage applicants to use this new feature and, if needed, to take the steps outlined above in order to be able to utilize this new feature during the pilot and thereafter.

During the two-month pilot, the Office will evaluate the stability and capacity of the E-Patent Reference feature to reliably provide electronic access to cited U.S. patent and U.S. patent application publication references. While copies of U.S. patent and U.S. patent application publication references cited by examiners will continue to be mailed with Office actions during the pilot project, applicants are encouraged to use the private PAIR and the E-Patent Reference feature to electronically access and download cited U.S. patent and U.S. patent application publication references so the Office will be able to objectively evaluate its performance. The public is encouraged to submit comments to the Office on the usability and performance of the E-Patent Reference feature during the pilot. Further, during the pilot period registered practitioners, and applicants not represented by a practitioner, are encouraged to experiment with the feature, develop a proficiency in using the feature, and establish new internal processes for using the new access to the cited U.S. patents and U.S. patent application publications to prepare for the anticipated cessation of the current Office practice of supplying copies of such cited

references. The Office plans to continue to provide access to the E-Patent Reference feature during its evaluation of the pilot.

### Comments

Comments concerning the E-Patent Reference feature should be in writing and directed to the Electronic Business Center (EBC) at the USPTO by electronic mail at [eReference@uspto.gov](mailto:eReference@uspto.gov) or by facsimile to (703) 308-2840. Comments will be posted and made available for public inspection. To ensure that comments are considered in the evaluation of the pilot project, comments should be submitted in writing by January 15, 2004.

Comments with respect to specific applications should be sent to the Technology Centers' customer service centers. Comments concerning digital certificates, customer numbers, and associating customer numbers with applications should be sent to the Electronic Business Center (EBC) at the USPTO by facsimile at (703) 308-2840 or by e-mail at [EBC@uspto.gov](mailto:EBC@uspto.gov).

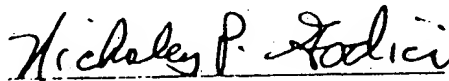
### Implementation after Pilot

After the pilot, its evaluation, and publication of a subsequent notice as indicated above, the Office expects to implement its plan to cease mailing paper copies of U.S. patent references cited during examination of non provisional applications on or after February 2, 2004; although copies of cited foreign patent documents, as well as non-patent literature, will still be mailed to the applicant until such time as substantially all applications have been scanned into IFW.

### For Further Information Contact

Technical information on the operation of the IFW system can be found on the USPTO website at <http://www.uspto.gov/wcb/patents/ifw/index.html>. Comments concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at [EBC@uspto.gov](mailto:EBC@uspto.gov).

Date. 12/1/03



Nicholas P. Godici  
Commissioner for Patents